

BERNATH, A.; HAJDU, I.; SAFTA, V.

Testing the Prot method of progressive stress fatigue mechanism.  
Studii tehn Timisoara 10 no.1:35-48 Ja-Je '63.

SAFTA, V.; BERNATH, A.

Contributions to the fatigue resistance determination by testing  
the progressive continuous loading method. Studii tehn Timisoara  
10 no.1:49-56 Ja-Je '63.

A new method of fatigue endurance testing by means of progressive  
loading. 57-65

NADASAN, St.; ROTHENSTEIN, B.; HOROVITZ, B.; SAFTA, V.; KREMMER, I.;  
GOLEA, A.

Influence of cathodic hydrogen on the fatigue resistance of carbon  
steel covered with nickel by electrolytic method. Studii tehn  
Timisoara 10 no.2:241-247 J1-D '63.

BERNATH, Al.; IOVITIU, E.; SAFTA, V.

Ultrasonic control of diesel electric engine frame plates. Studii  
tehn Timisoara 10 no.2:249-254 J1-D '63.

BERNATH, AL.; SAFTA, V.; SERBAN, VI.

Studies on the correlation between ultrasonic transparency,  
microstructure, and mechanical characteristics of railroad car axles.  
Studii tehn Timisoara 10 no.2:255-277 J1-D '63.

SAFTA, V.

Influence of some sulfur segregates on the fatigue resistance.  
Studii tehn Timisoara 10 no.2:279-287 J1-D '63.

L 32127-66 EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(1) JD

ACC NR: AP6023489

SOURCE CODE: RU/0018/65/000/002/0054/0072

AUTHOR: Safta, Voicu; Bernath, Alexandru

ORG: none

TITLE: Rapid methods for the determination of fatigue strength

SOURCE: Constructia de masini, <sup>17</sup>no. 2, 1965, 64-72

TOPIC TAGS: fatigue strength, metal property

ABSTRACT: A survey and critical analysis of the principal methods for the rapid determination of the fatigue strength of metals. Orig. art. has: 7 figures, 10 formulas, and 4 tables. [JPRS]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 008 / SOV REF: 017

OTH REF: 035

Card 1/1

BLG

0915

1449

S/129/62/000/012/008/013  
E073/E351

AUTHORS: Nedeshan, Sh.A., Rotenshteyn, B.F., Khorovits, B.A.  
and Safta, V.I.

TITLE: Increasing the fatigue strength by plating with an  
iron-nickel alloy

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,  
no. 12, 1962, 37 - 40

TEXT: The influence of plating the steels 45 and 60 with  
an Fe-Ni alloy and the influence of the thickness of the layer  
(25, 50 and 100  $\mu$ ) on the fatigue strength were investigated.

Conclusions: Ni-Fe layers deposited by plating with a low bath  
voltage improves the fatigue strength of the base material; the  
fatigue strength depends hardly at all on the thickness of the  
deposited layer; this is attributed to the lower internal  
stresses in layers deposited by plating. There are 4 figures and  
1 table.

ASSOCIATION: Timishorskiy politekhnicheskiy institut, Rumyniya  
(Timisoara Polytechnical Institute, Rumania)

Card 1/1



SATTIL, B.

533.5 : 531.788

✓ 1895 EXPERIMENTAL DETERMINATION OF THE  
PENNING-GAUGE CHARACTERISTICS M. Varicak,

H. Vosticki and B. Sattil.

Period: math. phys. astron. (Zagreb), Vol. 10, No. 1-2,  
89-96: (1955).

Phy The optimum working conditions are investigated. Oscillograms of the discharge current  $J$  as a function of the anode voltage  $V$  for constant magnetic field strength  $H$ , and of  $J$  as a function of  $H$  for constant  $V$ , were observed for different pressures. The gauge system, which is shown diagrammatically, was constructed so as to permit quick change of electrodes and results obtained using various electrode materials are tabulated. A stable gauge consisting of a 2.5 cm dia. Mo anode ring and stainless steel cathode plates, 1.5 cm dia. and 2.5 cm apart, was constructed and its pressure calibration curve for the optimum operating conditions of 1200 volts and 400 gauss is given. S. Weintraub

RDW 22K

44302

S/058/62/000/012/038/048  
A062/A101

247700

AUTHORS: Saftić, B., Varicák, M., Zuppa, M.

TITLE: Effect of monoenergetic 14.2 Mev neutron irradiation on the conductivity of germanium

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 66,  
abstract 12E471 ("Glasnik mat.-fiz. i astron.", 1961,  
16, no. 1 - 2, 121 - 123, English; summary in Serbo-Croatian)

TEXT: The conductivity variations of n-Ge irradiated by a flux of 14.2 MeV neutrons was investigated. The initial conductivity of the specimens was  $0.2837 \text{ ohm}^{-1}\text{-cm}^{-1}$ . In order to reduce the effect of the temperature variations of the surrounding medium, the specimens were placed in a thermostat (temperature  $30 \pm 0.05^\circ\text{C}$ ). The conductivity variation of the specimens after 15 hour-irradiation by a flux of  $5.10^8$  neutron/sec was as low as  $\sim 0.75\%$ . In the specimens which were not placed in the thermostat even that small variation was not noticed. The rate of removal of the carriers was determined as equal to 25 carriers per neutron. A possibility was obtained to detect the dependence previously assumed (RZh Fiz, 1960, no. 9, 23850) of the carrier removal rate on the initial carrier

Card 1/2

S/058/62/000/012/038/048  
Effect of monoenergetic 14.2 Mev neutron irradiation.. A062/A101

concentration, and also to determine the energetic levels of the radiation defects caused by the 14.2 Mev V neutron irradiation of Ge.

G. V.

[Abstracter's note: Complete translation]

Card 2/2

OGORELEC, Z., dipl fiz.; SAFTIC, Branimir, dipl. fiz.

Stabilizer of temperature with photocells. Elektrotehnika Hrv 5  
no.3:59-62 '62.

1. Institut "Ruder Boskovic" (Zagreb, Bijenicka 54) i Prirodoslovno-  
matematski fakultet u Zagrebu.

CHIOSA, L.; DUMITRESCU, S.; SAFTOIU, A.

Action of sodium succinate, fumarate, malate, and malonate upon the conditional-reflex activity of a laboratory of small animals. Studii cerc fiziol 5 no.3:489-499 '60. (EEAI 10:2)

1. Institutul de cercetari farmaceutice si Controlul medicamentelor, si Institutul de fiziologie normala si patologica "Prof. Dr. D.Danielopolu" al Academiei R.P.R. 2. Comitetul de redactie, Studii si cercetari de fiziologie, membru al Comitetului de redactie (for Chiosa).

(CONDITIOND RESPONSE)

(SODIUM SUCCINATE)

(SODIUM FUMARATE)

(SODIUM MALATE)

(SODIUM MALONATE)

SAFTOIU, Gh.,ing.

Specific solutions in the problem of using the turbine blades  
manufactured at Energo-Reparatii Enterprise. Energetica Rum  
3 no.4:145-148 Ap '60.

POTEYKOV, S.P., otv.red.; LEBEDEV, P.A., red.; GOLUB, N.V., red.;  
DOYCHENKO, G.P., red.; IKHEL'ZON, S.M., red.; MARKOV, I.G.,  
red.; SAF'YAN, A.Yu., red.; MARKUSIK, N., red.; SHAFETA, S.,  
tekhn.red.

[Latest developments in woodpulp and paper production] Novoe  
v tselliulozno-bumazhnom proizvodstve. Kiev. Gos.izd-vo  
tekhn.lit-ry USSR, 1960. 93 p. (MIRA 14:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut tsellyuloznoy  
i bumazhnoy promyshlennosti.  
(Woodpulp)

FOTEYEV, S.P.; SAF'YAN, A.Yu.

New method of cooking sulfite pulp. Bum.prom. 35 no.4:31-32 Ap '60.  
(MIRA 13:10)

(Canada--Woodpulp)



SAF'YAN, A.Yu.

Rapid method of drying paper (from "Pulp and Paper International,"  
1962; "Canadian Pulp and Paper Industry," 1962). Bum.1 der.prom.  
no.4:59 O-D '62. (MIRA 15:12)

(Paper---Drying)

SAF'YAN, A.Yu.; KULAKOVA, O.M.

Ultrasonic waves in pulp processing. Bum. i der. prom. no.3:60-  
62 J1-S '63. (MIRA 17:2)

SAR'YAN, A.Yu.; TIMCHENKO, G.I.

Vibration grinding apparatus. Bum. i der. prom. no.1:50-52 Ja-Mr  
'64. (MIRA 17:6)

SAP'YAN, A.Yu.; KULAKOVA, O.M.

New system of drying paper sheets. Bum. 1 der. prom. no. 1:52  
Ja-Mr '64. (MIRA 17:6)

SHUBIK, V.M.; SAF'YAN, B.E.; SHUBIK, Yu.G.

Effect of certain occupational factors in the pulp and paper industry  
on general immunological reactivity of the organism. Gig. i san. 24  
no.9:62-64 S '59. (MIRA 13:1)

1. Iz otдела mikrobiologii Instituta eksperimental'noy meditsiny AMN  
SSSR i Svetogorskoy gorodskoy bol'nitsy Lesogorskogo rayona Leningrad-  
skoy oblasti.

(OCCUPATIONS AND PROFESSIONS)  
(IMMUNITY)

MAKAR, A.; KARMAZIN, N., inzh. (Moskva); DROBYSHEVSKIY, V., inzh.; (Moskva);  
KOLESNIKOVA, N., inzh.; SAF'YAN, B., inzh.; POSPELOV, N., inzh.  
(Gor'kiy); VESELOV, A.

Suggested, developed, introduced. Izobr.i rats. no.2:34-35 F  
'60. (MIRA 13:8)

1. Chlen soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov stroitel'nogo tresta, g. Krasnotur'insk (for Makarov).
2. Tekhnicheskiy otdel tipografii "Pechatnyy dvor" imeni A.M. Gor'kogo, Lenindrad (for Kolesnikova, Saf'yan).
3. Predsedatel' soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, poselok Maksatikha, Kalininskaya oblast' (for Veselov).

(Technological innovation)

SAF'YAN, B.E.; SHUBIK, V.M. (Leningradskaya oblast')

Changes in the general immunological reactivity of the organism  
under the chronic action of low concentrations of carbon disulfide.  
Gig. truda i prof. zab. 4 no.3:41-44 Mr '60. (MIRA 15:4)

1. Svetogorskaya rayonnaya bol'nitsa.  
(CARBON DISULFIDE--TOXICOLOGY)

GARB, M.G.; SIGALOV, V.M.; SAF'YAN, D.A.

Driving synchronizing generator. Tekh.kino i telev. 4 no.7:  
19-24 JI '60. (MIRA 13:7)  
(Television--Transmitters and transmission)



ANDROSYUK, N.G.; GERASYUTENKO, N.L.; KROLEVETS, K.M.; SAF'YAN, D.I.

Automatic differential refractometer with a photoelectric cell.  
Avtom.1 prib. no.1:52-56 Ja-Mr '62. (MIRA 15:3)

1. Institut avtomatiki Gosplana USSR.  
(Refractometer)

ANDROSYUK, N.G. [Androsiuk, M.H.]; GERASYUTENKO, N.L. [Herasiutenko, N.L.];  
KROLEVETS, K.M. [Krolevets', K.M.]; SAF'YAN, D.I. [Saf"ian, D.I.]

Automatic flow refractometer. Ukr.fiz.zhur. 7 no.11:1231-1236  
N '62. (MIRA 15:12)

1. Institut avtomatiki, Kiyev.  
(Refractometer)

SAF'YAN, M. M.

42350 SAF'YAN, M. M. - Vybory rezhima obzhatiy v nepreryvnykh tonkolistovykh stankakh.  
(S primech. red.) Nauch. trudy (Dniprogetr. metallurg. in-t im. Stalina).  
VYP 12, 1948, s. 90-113.

SO: Ietopis'Zhurnal'nykh Statey, Vol. 47, 1948.

SAF'YAN, M.M., dots.

Investigation of roll flattening. Obr.met.davl. no.3:105-115  
'54. (MIRA 12:10)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni metallurgi-  
cheskiy institut im. I.V.Stalina.  
(Rolls (Iron mills))

*Saf'yan, M.M.* 123-1-503  
Translation from: Referativnyy Zhurnal, Mashinostroyeniye, 1957,  
Nr 1, p.82 (USSR)

AUTHORS: Chekmarev, A.P., Saf'yan, M.M., Pavlov, V.L.,  
Grudev, P.I.

TITLE: Tentative Heat Balance in Plastic Deformation  
(Orientirovochnyy teplovoy balans pri plasticheskoy  
deformatsii)

PERIODICAL: Trudy In-ta chernoy metallurgii AN UkSSR,  
1956, Nr 10, pp. 129-137.

ABSTRACT: For a proper selection of the cooling system for  
rollers in a cold-rolling mill it is necessary to know  
the quantity of heat emanating during the period of  
metal deformation, and the distribution of this heat.  
The author's research has indicated that the generated  
heat is being dissipated in the two

Card 1/2

123-1-503

Tentative Heat Balance in Plastic Deformation (Cont.)

running rollers, two supporting rollers, the rolled metal strip and in the coolant. The authors present thermal design data of the mill with running rollers of 400 mm in diameter, supporting rollers of 1,370 mm in diameter, the rollers' shaft of 1,600 mm long, and the 2,250 HP engine at 300 to 500 rpm.

Card 2/2

M.I.M.

*Saf'yan M.M.*

AUTHOR: Saf'yan, M.M.

133-6-22/23

TITLE: "Continuous Hot Rolling Strip Mills", Book, Moscow, Metallurgizdat, 1956, 240 p., 103 figures. ("Nepreryvnyye Listovyye Stany Goryachey Prokatki").

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.552-553 (USSR).

ABSTRACT: Favourable review by V.V. Mel'tser (Dotsent) and A.Ye.Pratushevich (Engineer).

ASSOCIATION: Magnitogorsk Mining-Metallurgical Institute and Magnitogorsk Combine (Magnitogorskiy Gorno-Metallurgicheskiy Institut i Magnitogorskiy Kombinat).

AVAILABLE: Library of Congress

Card 1/1

Saf'yan, Matvey M.

PHASE I BOOK EXPLOITATION

375

Katsnel'son, Genrikh Mayorovich; Saf'yan, Matvey Matveyevich;  
Chekmarev, Aleksandr Petrovich; Malyy, Georgiy Ivanovich

Prokatka tolstykh listov s povyshennoy tochnost'yu (Rolling of  
Steel Plate to Close Limits) Moscow, Metallurgizdat, 1957.  
125 p. 4,000 copies printed.

Ed. (title page): Chekmarev, A. P., Active Member, Ukrainian  
Academy of Sciences, Doctor, Professor; Ed. (inside book):  
Pirskiy, F. N.; Ed. of Publishing House: Valov, N. A.;  
Tech. Ed.: Karasev, A. I.

PURPOSE: This book is intended for engineers and technicians in  
rolling mills. It can also serve as a manual for  
researchers and students of vuzes.

COVERAGE: The book deals with the hot rolling of steel plate to  
close limits on a three-high Lauth mill. Various factors  
affecting the precision of rolled plate are discussed.  
The rolling of plate is subject to variables such as:  
temperature of metal, mill spring, roll design, and other  
characteristics inherent in the material and equipment.

Card 1/3



375

# Rolling of Steel Plate to Close Limits

The author investigates each of these problems and advances various solutions. There are numerous diagrams and formulae. 6 Soviet references.

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AVAILABLE: Library of Congress (TS 360.C45)

Card 3/3

GO/vm  
6-24-58

Saf'yan, M.M.

|                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PHASE I BOOK EXPLOITATION                                                                                                                                                                                                                        | SOV/3226                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mashinostroyeniye nauchno-tekhnicheskaya konferentsiya na temu "Sovremennyye dostizheniya prokatnogo proizvodstva."                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Trudy... (Transactions of the Intercollegiate Scientific and Technical Conference on Recent Achievements in the Rolling Industry)                                                                                                                | Leningrad, 1958. 251 p. 1,000 copies printed.                                                                                                                                                                                                                                                                                                                                                                                      |
| Sponsoring Agencies:                                                                                                                                                                                                                             | Leningradskiy politekhnicheskii institut im. M.I. Kalinina, Nauchno-tekhnicheskoye obshchestvo mashinostroyeniya, Leningradskoye otdeleniye, and Nauchno-tekhnicheskoye obshchestvo metallurgov, Leningradskoye otdeleniye.                                                                                                                                                                                                        |
| Resp. Ed.: V.S. Smirnov, Doctor of Technical Sciences, Professor;                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Ed.: M.M. Pavlov.                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| PURPOSE:                                                                                                                                                                                                                                         | These proceedings of the conference are intended for specialists in the rolling industry.                                                                                                                                                                                                                                                                                                                                          |
| COVERAGE:                                                                                                                                                                                                                                        | The articles of this collection cover various theoretical and practical problems of rolling, such as: pressure, spread, efficiency of rolling, determination of deformation, forces required, press design, optimum conditions for rolling, experiences of various plants, modernization of equipment, aluminum-die steel, and rolling of nonferrous metals. No personalities are mentioned. References appear after each article. |
| Beriyakovskiy, M.A. [Ural'skiy nauchno-issledovatel'skiy institut zhernykh metallov, (Ural Scientific Research Institute of Ferrous Metals), Sverdlovsk] Forces of Deformation of Metal and Automation of Band Thickness Control in Cold Rolling | 184                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Meleshko, V.I., and M.M. Saf'yan [Institut khimicheskoy metallurgii AN USSR (Institute of Ferrous Metallurgy, AS USSR)] Investigation of Energy Consumption, and Action of Force in a Continuous Hot-rolling Sheet Mill                          | 197                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Kuznetsov, I.D. [Zavod imeni Il'icha (Plant im. Il'ich)] Relation Between Geometric and Weight Tolerances of Plate Steel                                                                                                                         | 208                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Bogoyavlenskii, K.W. [Leningradskiy politekhnicheskii institut im. M.I. Kalinina, (Leningrad Polytechnical Institute im. M.I. Kalinin)] Bending Forces in a Structural Mill                                                                      | 214                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Chekmarev, A.F., Ya.L. Vatin, and D.M. Litinskiy. [Dnepropetrovskiy metallogicheskii institut, (Dnepropetrovsk Metallurgical Institute)] Wall Thickness Variation of Large Diameter Pipe                                                         | 223                                                                                                                                                                                                                                                                                                                                                                                                                                |

SOV/137-59-3-6759

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 261 (USSR)

AUTHORS: Meleshko, V. I., Safyan, M. M.

TITLE: An Investigation of Power and Efficiency Considerations in a Continuous Hot-strip Mill (Energeticheskoye i silovoye issledovaniya nepreryvnogo tonkolistovogo stana goryachey prokatki)

PERIODICAL: Tr. Mezhevuz. nauchno-tekhn. konferentsii na temu: "Sovrem. dostizh. prokatn. proiz-va". Leningrad, 1958, pp 197-207

ABSTRACT: Experimental data on pressures, torque moments, and the power required for rolling of the continuous thin-strip mill at the "Zaporozhstal" plant made it possible to locate the weakest links in the mechanisms of the mill and permitted creating a rational process technology. At the instant of gripping of the strip by the rolls, a small peak is observed in the pressure curve; the same condition is observed during the passage of the rear end of the strip through the rolls. Maximum pressure (1950t) is observed in the first roughing stand during rolling of steel of the 3sp grade. Regardless of the grade of steel, the specific pressure increases from the second to the fourth roll stand. Reducing the final thickness by 50% increases

Card 1/2

An Investigation of Power and Efficiency Considerations in a Continuous (c nt.) SOV/137-59-3-6759

the pressure by a factor of 1.5-2. At  $l_d/h_{av}=3.5$  the specific pressure for steels 3sp, 3kp, 08kp, 1Kh18N9T, and 30KhGSA amounts to 20-24, 20-27, 20-27, 44-52, and 29-37 kg/mm<sup>2</sup>, respectively. The greatest load is carried by the motors of the first stands of the finishing mill. The consumption of energy in the roughing mill is presented, in the form of curves, as a function of the ratio  $H/h$  for structural, alloyed, and stainless steels. The greatest amount of energy is consumed during rolling of stainless steel.

Ya. G.

Card 2/2

CHEKMAREV, A.P., akademik; SAF'YAN, M.M., dotsent; MELESHKO, V.I., kand.  
tekhn.nauk; TOPOROVSKIY, M.P., inzh.

Experimental investigation of pressure and capacity of roughing  
stands for continuous sheet metal rolling mills. Izv. vys. ucheb.  
zav.; chern.met. no.5:115-120 My '58. (MIRA 11:7)

1.AN USSR (for Chekmarev). 2.Dnepropetrovskiy metallurgicheskiy  
institut i Institut chernoy metallurgii AN USSR.  
(Rolling mills)

SAFYAN, M.M.

(10)

PHASE I. BOOK EXPLOITATION NOV/3611

Dnepropetrovsk. Metallurgicheskii Institut

Obrabotka metallov davleniyem (Metal Forming) Khar'kov, Metallurg-izdat, 1960. 326 p. (Series: Itsa Nauchnyye trudy, v. 39) 2,100 copies printed.

Ed.: A.P. Cherkasov; Ed. of Publishing House: R.A. Belina; Tech. Ed.: S.P. Andreyev.

PURPOSE: This collection of articles is intended for technical and scientific personnel in metallurgy and in mechanical engineering. It will also be of interest to designers of rolling equipment.

COVERAGE: This collection of articles treats the theory of rolling. It discusses such factors as the total and the unit pressures of the work on rolls, moments of rolling, forward slip, spread, etc. It also includes results obtained from investigation of roll quality, rolling of cast iron sheets, and other problems. No personalities are mentioned. References follow each article.

Cherkasov, A.P. [Academician of the USSR], L.V. Kapturav, and P.I. Klimenko [Engineers]. Experimental Investigation of Distribution of Unit Pressures on a Contact Surface in Rolling in Plain Rolls 5

The investigation was carried out to develop a reliable method of measuring unit pressure on the contact surface, and to obtain, by measurement, data on distribution of unit pressure during rolling with various drafts of strips having various initial thicknesses and widths.

Cherkasov, A.P., and P.I. Klimenko. Experimental Investigation of Distribution of Unit Pressures on the Contact Surface During Rolling in Grooved Rolls 30

Cherkasov, A.P., and Rudy V.S. [Candidate of Technical Sciences, Institut chernoy metallurgii N.U.SSR, and Vsesoyuzny nauchno-issledovatel'skiy truby Institut - Institute of Ferrous Metallurgy of the Academy of Sciences of the Ukrainian SSR, and the All-Union Scientific-Research Institute for Pipelines]. The Contact Surface, and Pressure on Rolls in Pilsner (Rockite) Rolling 53

The authors present new methods for measuring pressure on rolls in a Pilsner mill, for rolling pipes with 219, 273 and 225 mm diameters, and for determining the instant area of contact.

Vatkin, Yul. [Candidate of Technical Sciences]. Pressure on Rolls in Rotary Rolling of Tubes on a Short Mandrel 73

The author compares experimental data on the total and unit pressures with the results obtained through using formulas the author derived.

Cherkasov, A.P., V.M. Klimenko, V.I. Meleshko, M.M. Safyan, V.P. Cherkasov, and S.N. Rabinovich [Engineer]. Pressure on Rolls in Slabbing Mill 93

The authors describe the methods, instruments, and results of an investigation carried out at the "Zaporozhstal" mill on horizontal and vertical rolls at slab rolling.

Safyan, M.M. [Candidate of Technical Sciences]. Experimental Investigation on the Lever-Arm of Moments in Cold Rolling 104

The author describes investigation on the above subject, and gives the total pressure on rolls in cold rolling of steel sheets 1, 2, 3, and 4 mm thick at various drafts.

Cherkasov, A.P., and M.M. Safyan [Candidate of Technical Sciences]. Forward Slip in Shape Rolling 127

The author describes methods of designing shape rolls in respect to forward slip; the method is based on experiments with right-angled, square, rhombic, oval, and circular grooves.

Matyev, M.S. [Candidate of Technical Sciences]. Derivation of a Formula for Spread of Rolling on Plain Rolls 152

The author presents a method of calculation of spread in rolling. It is based on theoretical determination of stresses in the contact area in transverse and longitudinal directions.

SAF'YAN, M.M., kand.tekhn.nauk

Experimental investigation of the lever arm of moments in cold  
rolling. Nauch. trudy DMI no.39:104-116 '60. (MIRA 13:10)  
(Rolling mills)



CHEKMAREV, A.P., akademik; MELESHKO, V.I., kand.tekhn.nauk; SAF'YAN, M.M.,  
dots.

Experimental determination of power and moments of rolling in the  
finishing section of the continuous 1680-type sheet-rolling mill.  
Nauch. trudy DMI no.39:293-310 '60. (MIRA 13:10)

1. AN USSR (for Chekmarev).  
(Rolling mills)

S/137/61/000/006/031/092  
A006/A101

AUTHORS: Chekmarev, A.P., Klimenko, V.M., Meleshko, V.I., Saf'yan, M.M.,  
Chekhranov, V.D., Rabinovich, S.N.

TITLE: Pressure on rolls in rolling on a slab mill

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 3, abstract 6D13  
("Nauchn. tr. Dnepropetr. metallurg. in-t", 1960, no. 39, 93 - 103)

TEXT: The authors describe methods and results of investigating the pressure of metal on horizontal and vertical rolls of a slab mill at the "Zaparozhstal'" Plant. The investigation was carried out in 1954. The pressure on the rolls was measured with the aid of dynamometers. The results and data obtained from the rolling of soft-grade and stainless steel slabs show, that the magnitudes of full pressure on the horizontal rolls are relatively uniformly distributed over the passes. Maximum pressure when rolling stainless steel is 1,350 - 1,450 tons, and 900 - 1,400 tons when rolling soft steels. The distribution of pressure over the passes on vertical rolls without resetting them, is non-uniform; pressure is considerably higher in even passes than in odd ones. In rolling

Card 1/2

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Pressure on rolls in rolling on a slab mill

S/137/61/000/006/031/092  
A006/A101

with resetting of vertical rolls, the distribution of pressure over the passes is relatively uniform. Maximum pressure is 300 - 350 tons on soft steels and 700 - 750 tons on stainless steels.

T. Davydov

[Abstracter's note: Complete translation]

Card 2/2

S/123/61/000/014/031/045  
A004/A101

AUTHORS: Chekmarev, A.P., Meleshko, V.I., Saf'yan, M.M.

TITLE: Experimental determination of the power and moments of rolling in the finish train of the 1680 continuous sheet rolling mill

PERIODICAL: Referativnyy zhurnal. Mashinostroyeniye, no. 14, 1961, 21-22, abstract 14V133 ("Nauchn. tr. Dnepropetr. metallurg. in-t", 1960, no. 39, 293 - 310)

TEXT: The authors describe the method and the results of determining the power and moments in the stands of the finish train of the 1680 hot-rolling sheet mill, obtained by oscillographing, with the aid of an МПО -2 (МРО-2) eight-loop oscillograph, the current magnitude in the rotor of the driving electromotor, voltage on the rotor terminals, and the number of revolutions of the work rolls during the rolling by the mill of the main types and sizes. As a result of the investigations carried out it was found that: 1) by measuring the current magnitude of the main drive motors it is possible to establish the presence of strip tension between the stands of the finish train; 2) the magnitude of the rolling moment can be determined by an oscillogram of the currents, voltage and number of

Card 1/2

Experimental determination ...

S/123/61/000/014/031/045  
A004/A101

revolutions taking into account the tension; 3) the presented test data make it possible to obtain by calculation the motor loads during the planning of the rolling conditions for some carbon and alloyed steels on the investigated 1680 mill; 4) it follows from the analysis of the experimental data that the load distribution of the main drive motors ensures, as a rule, the maximum utilization of the metal ductility and the correct strip profile; 5) it is possible to calculate the rolling moments and, subsequently, all energy parameters of the new reduction conditions on the basis of the experimental values of the coefficient of the arm of the moment and specific pressure.

G. Davydov

[Abstracter's note: Complete translation]

Card 2/2

22575

S/133/61/000/001/007/016

A054/A033

18.5100

AUTHORS: Chekmarev, A.P., Member of the Academy of Sciences USSR; Saf'yan, M.M., Candidate of Technical Sciences; Meleshko, V.M., Candidate of Technical Sciences; Soroko, L.N., Engineer; Kholodnyy, V.F., Engineer

TITLE: Heating the Finishing Stand Rolls of Wide Strip Mills

PERIODICAL: Stal', 1961, No. 1, pp. 43 - 46

TEXT: The frequent breakdowns of rolls in continuous and semi-continuous strip mills are a serious drawback for the increasing productivity of these machines. Breakdowns are mainly due to thermal stresses caused by the non-uniform heating of the rolls. Tests carried out to investigate this problem showed that the heat stresses depend largely on the degree of reduction, the temperature and the length of the strip and the speed of rolling. The thin surface layer of the rolls suddenly becomes heated to up to 102°C, when the strip enters and suddenly cools down when the strip leaves the roll. To eliminate the thermal stresses due to sudden temperature changes, the rate of rolling on the finishing stand in the Zavod Zaporozhstal' (Zaporozhstal' Plant) in the beginning of the working period

Card 1/8

22575

S/133/61/000/001/007/016

A054/A033

X

# Heating the Finishing Stand Rolls of Wide Strip Mills

is decreased, e.g., the 1,680 mm stand of this plant produces 200 tons in the first hour after the rolls have been changed instead of 400 tons. In order to prevent heat stresses in the rolls and thus to eliminate production losses, the present article suggests the rolls to be preheated before operation to the temperature which corresponds to the normal rolling temperature on the particular stand. For this purpose an inductor has been designed, composed of three coiled cores, two of which are mounted under the roll, the third above it. The inductor is a.c. fed (50 cps, 380 v). The rolls, the ball bearings and supports are connected with this device. In the working rolls of the finishing stand holes were drilled in which thermocouples (three pairs per roll) were fitted. The test results are plotted in Figures 4, 5, 6 and 7, and it was established that six pairs of the continuous finishing stand rolls could be preheated effectively, according to the following scheme. Four h before they are mounted on the stand the rolls of stands VIII - IX, then the rolls of stand VI and VII and finally those of stand V and X should be preheated by the inductor described. The heated rolls have to be wrapped in flannel and stored on shelves, so that the temperature will be distributed in them evenly, before they are mounted on the stand. The time available is 3 h for the rolls of stand VIII - IX, 2 h for those of stand VI - VII and 1 h for the rolls of stand V. The rolls of stand X, whose working tem-

Card 2/8

Heating the Finishing Stand Rolls of Wide Strip Mills

22575

S/133/61/000/001/007/016

A054/A033

perature is lower than that of the others, are heated only for 25 min and they are rolled over every 12 min. The temperature equalization takes 1.5 h in these rolls. By using a device for rotating the rolls slowly in the inductor, heating can be made more uniform. With preheated rolls mounted on the stand no special "heating up" period for the finishing stand process was necessary and the stands could operate at full capacity after the preheated rolls were mounted. There are 7 figures and 5 references: 1 Soviet and 4 non-Soviet.

ASSOCIATIONS: Institut chernoy metallurgii AN UkrSSR (Institute of Ferrous Metallurgy of the Academy of Sciences UkrSSR); Dnepropetrovskiy metallurgicheskii institut (Dnepropetrovsk Metallurgical Institute); zavod "Zaporozhstal'" ("Zaporozhstal' Plant)

Card 3/8



S/137/61/000/006/036/092  
A006/A101

AUTHOR: Saf'yan, M.M.

TITLE: An experimental investigation of the arm of moments in cold rolling

PERIODICAL: Referativnyi zhurnal. Metallurgiya, no. 6, 1961, 6, abstract 6D47  
("Nauchn. tr. Dnepropetr. metallurg. in-t", no. 39, 1960, 104-116)

TEXT: Investigations were made during rolling of about 100 mm wide and 1, 2, 3 mm thick 08k0 (08kp) steel strips on a four-high mill with working rolls of 126.7 mm in diameter and backing rolls of 420 mm in diameter. Graphs are plotted showing the dependence of the full metal pressure on the rolls and of the deformation moments on relative reduction, strip thickness and preliminary degree of reduction. It was established that for the case investigated, i.e. cold rolling of sheets, the coefficient of the arm of moments did not exceed 0.3. ✓

V. Fospekhov

[Abstracter's note: Complete translation]

Card 1/1

S/137/61/000/006/032/092  
A006/A101

AUTHORS: Chekmarev, A.P., Meleshko, V.I., Saf'yan, M.M.

TITLE: Experimental determination of the power and moments of rolling in the finishing group of a continuous thin-sheet 1680 mill

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 3, abstract 6D18 ("Nauchn. Dnepropetr. metallurg. in-t", 1960, no. 30, 293-310)

TEXT: The authors present methods and results of determining the power and moments of rolling on the stands of a finishing group of a hot rolling 1680 mill. The data were obtained from oscillograms made with a 8-lcop MPO-2 (MPO-2) oscillograph, recording the current intensity in the rotors of the drive motors, the voltage on the rotor terminals and the number of revolutions of the working rolls during rolling of the basic assortments of the mill. As a result of the investigation it was established that 1) by measuring the current intensity of the main motor drives, the tension of the strip between the stands of the finishing group can be established; 2) the magnitude of the moment of rolling can be determined from the oscillogram of currents, voltage and the number of revolutions by taking into account the tension; 3) the experimental data submitted

Card 1/2

PHASE I BOOK EXPLOITATION

SOV/6000

Saf'yan, Matvey Matveyevich

Goryachaya prokatka listov na neprerivnykh i polunepreverivnykh stanakh  
(Hot Rolling of Plates and Sheets in Continuous and Semicontinuous  
Mills) 2d ed., rev. and enl. Moscow, Metallurgizdat, 1962. 380 p.  
3700 copies printed. Errata slip inserted.

Ed.: V. S. Rokotyan; Ed. of Publishing House: R. M. Golubchik; Tech.  
Ed.: L. V. Dobuzhinskaya.

PURPOSE: This book is intended for scientific research and engineering  
personnel as well as for personnel of design and planning bureaus.  
It may also be useful to students who are studying the rolling  
process.

COVERAGE: The book reviews the technology of heating, rolling, and  
finishing of plates and sheets in continuous and semicontinuous  
hot rolling mills. Brief information is presented on designs and  
layouts of mills. Particular attention is given to reduction  
conditions and to the service life, wear, and design of rolls, as  
Card 1/4

Hot Rolling of Plates (Cont.)

SOV/6000

well as to the adjustment of continuous mills after roll change. Chapter III was written by Yu. I. Rozen~~g~~gart, Docent, Candidate of Technical Sciences, and Section 3 of Chapter I by Professor Ye. S. Rokotyan, Doctor of Technical Sciences. There are 98 references, mostly Soviet.

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| Card 2/                                                                                       |    |

CHEKMAREV, A. P., akademik; MELESHKO, V. I., kand. tekhn. nauk;  
SAF'YAN, M. M., kand. tekhn. nauk; KHOLODNYI, V. P., inzh.

Temperature conditions of roughing rolls on continuous thin-sheet  
mills. Nauch. trudy DMI no.48:121-131 '62. (MIRA 15:10)

1. Akademiya nauk Ukrainskoy SSR (for Chekmarev).

(Rolls(Iron mills)) (Thermal stresses)

SAF'YAN, M. M., kand. tekhn. nauk; KHOLODNYI, V. P., inzh.

Experimental deflection determination of the rolls on four-  
high rolling mills. Nauch. trudy DMI no.48:216-227 '62.  
(MIRA 15:10)

(Rolls(Iron mills)—Testing)

SAF'YAN, M. M., kand. tekhn. nauk; KHOLODNYI, V. P.; inzh.

Experimental determination of the torque arm during the cold  
rolling of alloyed steels. Nauch. trudy DMI no. 48:228-238 '62.  
(MIRA 15:10)

(Rolling(Metalwork)) (Torque)

S/133/63/000/001/008/011  
A054/A126

AUTHORS:

Chekmarev, A. P., Saf'yan, M. M., Kholodnyy, V. G., Soroko, L. N.,  
Ksenzuk, F. A.

TITLE:

Determination of the strip temperature during rolling on continuous  
thin strip mills

PERIODICAL: Stal', no. 1, 1963, 62 - 65

TEXT:

A uniform structure of the strip with a grain size that ensures the required mechanical characteristics can only be obtained, if the end temperature of rolling is higher than  $Ar_3$  and the temperature of coiling is below  $680^{\circ}C$ . To determine the factors affecting the strip temperature during rolling, extensive tests were carried out at the zavod "Zaporozhstal'" ("Zaporozhstal' Plant) on the 1,680 mm mill, covering the slab temperature from the time the product was in the heating section of the furnace onward through its passing the roughing mill (beyond the IV stand of this group), before the V finishing stand and beyond the X stand, by means of photoelectric pyrometers and also with a portable radiation tube at various spots between the stands of the finishing

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S/133/63/000/001/008/011

A054/A126

# Determination of the strip temperature...

group. The effects of the heat absorbed by the slab during heating, the cooling time, the cooling methods, the strip surface-to-volume ratio, the chemical composition of the steel, the strip thickness and the rolling rate on the strip temperature were studied. In the tests, stainless [1X18H9T (1Kh18N9T)] and carbon [CT.3kp (St.3kp)] grades were rolled to sizes varying between 3 x 1,030 and 6 x 1,232 mm. The temperature changes on the finishing stands, the effect of the rolling rate on the X stand and of strip thickness on the end temperature are shown in 8 graphs. At equal temperatures, strip thicknesses and rolling conditions, the end temperature of rolling for stainless steel strips is about 50 - 60°C higher than for carbon steel strips of the same dimensions. Increasing the rolling rate on the X stand by 10 m/min raises the end temperature of rolling for carbon steels by 2 - 3°C and for stainless steels by 5 - 6°C. By reference to the test results on the finishing stands and known equations used in temperature calculations the following empirical formulae were drawn up:

$$t = 815 + \frac{228(h-2)}{(h-2) + 2.57} \quad (3) \quad \text{for carbon steels and}$$

$$t = 920 + \frac{71(h-3)}{(h-3) + 0.76} \quad (4) \quad \text{for stainless steels,}$$

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SAFYAN, M.M.

32

PHASE I BOOK EXPLOITATION

SOV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azaronko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vernik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences BSSR; A. Ye. Gurevich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. F. Yermolayev, Engineer; Ye. A. Zhukovich-Stopha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynov, Engineer; A. M. Kogos, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Laskin, Engineer; B. A. Levitanskiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Mayerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pasternak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

Card 1/13

Rolling Industry; Handbook

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SOV/5985

Engineer; O. P. Solov'yev, Engineer; M. A. Sidorkevich, Engineer; Ye. M. Tratyakov, Engineer; I. S. Trishovskiy, Candidate of Technical Sciences; G. N. Khenkin, Engineer; and A. I. Tselikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tselikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Rokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are

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Rolling Industry; Handbook

SOV/5985

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Ch. 20. Plate and Sheet Hot-Rolling Mills (A. A. Korolev, M. Ye. Kugayenko, M. V. Kovynev, M. M. Saf'yan)

Card 13/19

SAF'YAN, M. M.

(40)

PHASE I BOOK EXPLOITATION

SOV/6044

Rokotyan, Ye. S., Doctor of Technical Sciences, Ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook)  
v. 2. Moscow, Metallurgizdat, 1962. 685 p. 8500 copies  
printed.

Authors: P. A. Aleksandrov, Doctor of Technical Sciences;  
V. P. Anisiforov, Candidate of Technical Sciences; V. I. Bayrakov,  
Candidate of Technical Sciences; M. V. Barbarich, Candidate  
of Technical Sciences; B. P. Baldit'nov, Candidate of Technical  
Sciences [deceased]; B. A. Bryukhanenko, Candidate of Economic  
Sciences; M. V. Vasil'chikov, Candidate of Technical Sciences;  
A. I. Vitkin, Doctor of Technical Sciences; S. P. Granovskiy,  
Candidate of Technical Sciences; P. I. Grudev, Candidate of  
Technical Sciences; I. V. Gunin, Engineer; M. Ya. Dzugutov,  
Candidate of Technical Sciences; V. G. Drozd, Candidate of  
Technical Sciences; N. P. Yermolayev, Engineer; G. H. Katsnel'son,  
Candidate of Technical Sciences; M. V. Kovyn'nev, Engineer;  
M. Ye. Kugayenko, Engineer; N. V. Litovchenko, Candidate of  
Technical Sciences; Yu. M. Matveyev, Candidate of Technical  
Sciences.

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SOV/6044

Rolling Industry; Handbook

Sciences; V. I. Moleshko, Candidate of Technical Sciences;  
N. V. Melnikov, Engineer; A. K. Minburg, Candidate of Tech-  
nical Sciences; V. D. Mosov, Engineer; B. I. Panchenko,  
Engineer; O. A. Plyatskovskiy, Candidate of Technical  
Sciences; I. S. Pobedin, Candidate of Technical Sciences;  
I. A. Priymak, Professor, Doctor of Technical Sciences  
[deceased]; A. A. Protasov, Engineer; M. M. Saf'yan,  
Candidate of Technical Sciences; N. M. Fedosov, Professor;  
S. N. Filipov, Engineer [deceased]; I. N. Filippov, Can-  
didate of Technical Sciences; I. A. Pomichev, Doctor of  
Technical Sciences; M. Yu. Shifrin, Candidate of Technical  
Sciences; E. R. Shor, Candidate of Technical Sciences; M. V.  
M. M. Shternov, Candidate of Technical Sciences; M. V.  
Shuralev, Engineer; I. A. Yul'vets, Candidate of Technical  
Sciences; Eds. of Publishing House: V. M. Gorobinchenko,  
R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for engineering personnel of  
metallurgical and machine-building plants, scientific research

Card 2/14

Rolling Industry; Handbook

SOV/6044

instituted, and planning and design organizations. It may also be used by students at schools of higher education.

COVERACE: Volume 2 of the handbook reviews problems connected with the preparation of metal for rolling, the quality and quality control of rolled products, and designs of roll passes in merchant mills. The following topics are discussed: processes of manufacturing semifinished and finished rolled products (the rolling of blooms, billets, shapes, beams, rails, strips, wire, plates, sheets, and the drawing of steel wire), hot-dipped tin plates, lacquered plates, floor plates, tubes made by different methods, and special types of rolled products. Problems of the organization of rolling operations are reviewed, and types of rolled products manufactured in the USSR are shown. No personalities are mentioned. There are no references.

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CHEKMAREV, A.P.; SAF'YAN, M.M.; KHOLODNYI, V.G.; SOROKO, L.N.; KSENZUK, F.A.

Determining the temperature of strip during its rolling on continuous  
thin sheet mills. Stal' 23 no.1:62-65 Ja '63. (MIRA 16:2)  
(Rolling (Metalwork))

SAF'YAN, Matvey Matveyevich; MELESHKO, Vladimir Ivanovich; KATSNEL'SON,  
Genrickh Mayorovich; GOLUBCHIK, R.M., red.; DOBUZHINSKAYA,  
L.V., tekhn. red.

[Hot rolling of sheet; a handbook for metalworkers] Goria-  
chaia prokatka listov; spravochnik dlia rabochikh. Moskva,  
Metallurgizdat, 1963. 166 p. (MIRA 16:6)  
(Rolling (Metalwork))--Handbooks, manuals, etc.)

CHEKMAREV, A.P., akademik; SAF'YAN, M.M., inzh.; KHOLODNYI, V.P., inzh.;  
SOROKO, L.N., inzh.

Investigating the wear of working and backing rolls on  
continuous hot rolling sheet mill. Met. i gornorud. prom.  
no.5:23-28 S-0 '63. (MIRA 16:11)

1. Dnepropetrovskiy metallurgicheskiy institut (for Chekmarev,  
Saf'yan, Kholodnyy).
2. Zavod "Zaporozhstal'" (for Soroko).
3. AN UkrSSR (for Chekmarev).

VALERSHTEYN, I.; LUKINA, L., inzh.; SAF'YAN, B., inzh.

Cooperation is the pledge of success. NTO 5 no.11:19-20 N '63.

(MIRA 16:12)

1. Predsedatel' soveta Nauchno-tehnicheskogo obshchestva tipografii  
"Pechatnyy dvor" imeni A.M. Gor'kogo (for Valershteyn). 2. Chleny  
soveta Nauchno-tehnicheskogo obshchestva tipografii "Pechatnyy dvor"  
(for Lukina, Saf'yan).

L 19840-65 EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4 MJW/JD/HW

ACCESSION NR: AP4049064

S/0148/64/000/011/0112/0119

AUTHOR: Chekmarev, A. P.; Saf'yan, M. M.; Kholodny'y V. P.; Ksenzyuk, F. A.

TITLE: Variations in longitudinal thickness during hot rolling of metal strips on continuous sheet mill's

SOURCE: IVUZ. Chernaya metallurgiya, no. 11, 1964, 112-119

TOPIC TAGS: hot rolling, continuous sheet mill, longitudinal thickness, metal strip rolling

ABSTRACT: Variations in longitudinal thickness of hot-milled strips are due either to variation in temperature along the strip or to variation in pressure between the stands caused by roller wobbling, the ends of the strips being thicker than the middle. Experiments on the thickness of strips were performed on a continuous sheet mill at the Zaporozhstal' factory, with an oscillograph placed on the tenth stand set to show the change in thickness of the strip. Oscillograms showed that in every case the ends were thicker than the centers, and the trailing edge was thicker than the leading edge. 1Kh18N9T steel showed a greater variation in thickness than carbon steels. The difference in temperature from the front to the rear can be reduced by a reduction in size of the strip of metal. Experiments

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L 19840-65

ACCESSION NR: AP4049064

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446720013-3

showed that increasing the rate of revolution of the tenth stand rollers by 15% and correspondingly increasing the rate of feed reduced the thickness by 11% and the area by 17.5%. In general, experiments confirmed theoretical predictions within reasonable limits. Orig. art. has: 3 graphs, 3 tables, and 6 formulas.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Inst. rube)

SUBMITTED: 07Jul62

ENCL: 00

SUB CODE: MM

NO REF SOV: 006

OTHER: 001

Card 2/2

CHEKMAREV, A. P.; SAF'YAN, M. M.; KHOLODNYI, V. P.

Shear drag in rolling strips with irregular reduction. Izv.  
vys,ucheb,zav.; chern.met.7 no. 4:77-82 '64. (MIRA 17:5)

1. Dnepropetrovskiy metallurgicheskiy institut.

L 41274-SL EBT(J)/LMT(E)/EMI(F)/ENF(C)/ENP(V)/T/ENP(L)/ETI/ENI(R)/ENP(A)/ENI(I)  
 ACC NR: AT6012689 (N) SOURCE CODE: UR/3177/65/021/000/0038/0052  
 IJP(C) JD/EN/EN/JG/DJ/JT

AUTHOR: Chekmarev, A. P. (Academician AN UkrSSR); Saf'yan, M. M. (Professor); Meleshko, V. I. (Candidate of technical sciences); Prokof'yev, V. I. (Candidate of technical sciences); Avramenko, I. N. (Engineer); Dodoka, V. G. (Engineer); Ksenzuk, F. A. (Engineer); Kudin, D. P. (Engineer); Lola, V. N. (Engineer); Movshovich, V. S. (Engineer); Pavlishchev, V. B. (Engineer); Soroko, L. N. (Engineer); Sukhobrus, Ye. P. (Engineer); Kholodnyy, V. P. (Engineer); Yudin, M. I. (Engineer)

ORG: none \*

TITLE: Improvements in the techniques of production of Kh18Ni0T cold-rolled wide-strip steel at the Zaporozhstal' Plant. III

SOURCE: \* Dnepropetrovsk. Institut chernoy metallurgii. Trudy, v. 21, 1965. Prokatnoye proizvodstvo (Welding production), 38-52 III

TOPIC TAGS: stainless steel, bright stock lubricant, metal rolling, sheet metal, industrial plant / Kh18Ni0T stainless steel, P-28 bright stock lubricant

ABSTRACT: On increasing to 11.8 tons from the previous 10.3 tons the weight of the ingots

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L 41274-66

ACC NR: AT6012089

of Kh18Ni0T stainless steel used to produce 1000 mm wide sheets, the Zaporozhstal' Plant found it possible to reduce by 40-50 kg/mm<sup>2</sup> the wastage of metal during slabbing. Other innovations introduced in recent years at this plant include: fettling, flame scarfing and planing of ingot surfaces so as to eliminate defects of metallurgical origin prior to slabbing. These measures, along with improvements in the ingot reheating regime, have made it possible to increase the productivity of slabbing mills by 15-20%. The ingots themselves are cone-shaped in order to optimize the conditions of crystallization of the molten metal. After trimming and heating to 1050-1300°C the slabs proceed to a continuous strip mill where they are rolled into 1000 mm wide strip. By introducing the cold rolling of this strip in a reversible four-high mill with a reduction of 85% and by abandoning the practice of intermediate quenching during the production of 0.8-1.4 mm thick sheets rolled from 3.0 mm thick stock, using P-28 bright stock (highly viscous mineral oil) as the lubricant using highly polished rolls, and increasing the convexity of the rolls to offset the increase in roll pressure, and thus streamlining the rolling techniques to an extent at which it became possible to roll in 13 passes 0.8 mm thick strip without overloading the rolls and main drive, the Zaporozhstal' Plant has found it possible to increase by 81% the productivity of its sheet mill and by 180%, the productivity of its reversible cold-rolling mill. The annual savings produced by these innovations amount to: for the slabbing-mill shop, 162,000 rubles; for the sheet-mill shop, 91,000 rubles; for the cold rolling shop, 719,000 rubles. Orig. art. has: 3 figures, 9 tables.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 015

Card 2/2 LC



CHEKMAREV, A.P.; SAF'YAN, M.M.; KHCLODNYI, V.P.; SUKHOBURUS, Ye.P.

Study of nonuniform deformation in rolling slabs on a continuous  
sheet mill. Stal' 25 no.4:334-335 Ap '65. (MIRA 18:11)

1. Dnepropetrovskiy metallurgicheskiy institut.

SAF'YANNIKOVA, Ye.B.

Innervation of the internal mammary artery [with summary in English]  
Arkhnat.gist. i embr. 35 no.2:54-58 Mr-Apr '58. (MIRA 11:5)

1. Kafedra normal'noy anatomii cheloveka (zav. - prof. G.F. Ivanov  
[deceased]) I Moskovskogo ordena Lenina meditsinskogo instituta  
im. I.M. Schenova. Moskva, Volokolamskoye shosse, TSentr.  
klinich.bol'nitsa Ministerstva putey soobshcheniya, dom medrabotni-  
kov, kv.5.

(THORAX, blood supply

internal mammary artery, innerv. of artery in man &  
dogs (Rus))

(ARTERIES, SUBCLAVIAN, innervation

internal mammary artery inner. in man & dogs, histol.  
(Rus))

SAF'YANNIKOVA, Ye.B., Cand Med Sci -- (diss) "Innervation of the  
*internal thoracic*  
~~inner interior pectoral~~ artery." Mos, 1959, 16 pp (First Mos Order  
of Lenin Med Inst im I.M. Sechenov) 200 copies (KL, 36-59, 120)

- 106 -

SAF'YANOV, G.A.

Elements of physico-geographical studies of the places where  
pipelines cross reservoirs. Geog. i khoz. no. 9:57-59 '61.  
(MIRA 14:11)

(Kuybyshev Reservoir--Pipelines)

SAF'YANOV, G.A.—(Moskva)

Earthquake traces in the mountains of Central Asia. Priroda 50 no.8:  
93-95 Ag '61. (MIRA 14:7)

(Surkhob Valley--Earthquakes)

SAF'YANOV, G.A.

Chemical leaching of shores and the abrasion process. Okeanologiya  
2 no.4:673-682 '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,  
kafedra geomorfologii.  
(Leaching) (Coast changes)

SAF'YANOV, G.A.

Forms of chemical abrasion on gypseous shores. Vest. Mosk. un.  
Ser. 5: Geog. 18 no.4:73-76 J1-Ag'64. (MIRA 17:2)

SAF'YANOV, G.A.

The flow of dissolved matters along the shore line. Vest. Mosk.  
un. Ser. 5: Geog. 19 no.2:82-85 Mr-Ap '64. (MIRA 17:4)



SAF'YANOV, G.A.

On the dynamic structure of the breaker current. Vest. Mosk.  
un. Ser. 5: Geog. 19 no.3:81-83 Mya '64. (MIRA 17:6)

SAF'YANOV, G.A.

Hydrochemical method for calculating the rate of the abrasion  
process. Izv. Vses. geog. ob-va 96 no.3:231-233 '64

(MIRA 17:8)

SAF'YANOV, G.A.

Abrasive action of debris material in the coastal zone.  
Okeanologiya 5 no.2:304-310 '65. (MIRA 18 6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,  
geograficheskiy fakul'tet.

ACC NR: AP7003189

(N)

SOURCE CODE: UR/0213/66/006/006/1023/1029

AUTHOR: Lebedev, V. L.; Saf'yanov, G. A.

ORG: Moscow State University im. M. V. Lomonosov. Geography Division (Moskovskiy gosudarstvennyy universitet. Geograficheskiy fakul'tet)

TITLE: Effect of solid and gaseous suspensions on the hydrostatic pressure of sea water

SOURCE: Okeanologiya, v. 6, no. 6, 1966, 1023-1029

TOPIC TAGS: oceanography, ocean dynamics, sea water, hydrostatic pressure

ABSTRACT: Direct aerometric measurements carried out with distilled water and with fresh water containing various amounts of suspended solid particles were used to confirm the growth of hydrostatic pressure in a fluid with an increase in the concentration of suspended solid particles. A slow precipitation of each suspended particle creates an additional pressure on a horizontal plane below the particle, which can be determined by integrating Ozeen's differential equation for the pressure upon an arbitrary surface element in a plane at a known distance from the particle. Experiments proved that the presence of vigorous currents, and particularly of turbidity currents near the bottom, accompanied variations in the hydrostatic pressure of a water layer with local oversaturation of solid suspensions. The increase of hydrostatic pressure in water is also ascertained by the presence of bubbles, which

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UDC: 551.463.1(26)

ACC NR: AP7003189

appear under national conditions due to the oversaturation of the water by dissolved gases. Orig. art. has: 2 figures and 9 formulas.

SUB CODE: 08/ SUBM DATE: 18Sep65/ ORIG REF: 010/ OTH REF: 006

Card 2/2

LEONT'YEVA, YU.A., dotsent; GERASIMOV, B.S., dotsent; TRUSHKINA, L.R., aspirant; SOBOLEVA, Ye.M., kand. sel'skokhoz. nauk; SHARIPOV, B.S., nauchnyy sotrudnik (Tashkent); SAF'YANOV, S.P., aspirant; KRALL, E.L., kand. biolog. nauk; YULDASHEVA, Kh.Yu., mladshiy nauchnyy sotrudnik; KUZNETSOVA, P.A., agronom (Kostroma); ZHALNINA, L.S., mladshiy nauchnyy sotrudnik; SENCHENKO, M.G., mladshiy nauchnyy sotrudnik; SINITSYNA, A.A., nauchnyy sotrudnik; GOLUBEKIN, V.G., starshiy nauchnyy sotrudnik; BOGOVIK, I.V., kand. biolog. nauk (L'vov).

Brief news. Zashch. rast. ot vred. i bol. 9 no.10:52-56 '64  
(MIRA 18:1)

1. Kafedra zashchity rasteniy Kuybyshevskogo sel'skokhoz nauchno-issledovatel'skogo instituta (for Leont'yeva, Gerasimov). 2. Samarkandskiy universitet (for Trushkina). 3. Kazakhskiy institut zashchity rasteniy (for Saf'yanov). 4. Institut zoologii i botaniki AN Estonskoy SSR, Tartu (for Krall'). 5. Sredneaziatskiy institut zashchity rasteniy (for Yuldasheva). 6. Institut lubyanykh kul'tur (for Zhalnina, Senchenko). 7. Institut sadovodstva nechernozemnoy polosy (for Sinitsyna). 8. Novosibirskaya sel'skokhozyaystvennaya opyt'naya stantsiya (for Golubkin).

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.;  
SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; REKHLIS, G.N.;  
TRUSEYEV, A.I.; Primali uchastiye: GUBENKO, S.M.; FOMIN, S.I.;  
KUBLITSKIY, A.M.; SAFIYANOV, V.P.; VOLYNKIN, V.M.

Some problems in the hydrodynamics of a converter bath. Met.  
i gornorud. prom. no.3:29-31 My-Je '65. (MIRA 18:11)

L 10689-63

EWI(m)/BDS--ASD--RM/JT

ACCESSION NR: AP3002403

8/0153/63/006/002/0341/0343 53

AUTHOR: Yevlanov, G. A.; Saf'yanova, N. Ye. 52

TITLE: Thermal stability of the ion-exchange resin KY-1 7

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 6, no. 2, 1963, 341-343

TOPIC TAGS: thermal stability KY-1 resin, stoichiometric property, KY-1 ion-exchange resin

ABSTRACT: The object of this investigation is to study the thermal properties of the synthetic ion-exchange resin KY-1 by a thermographic method with a quantitative analysis of the decomposition products and autoclave investigation, with a consequent evaluation of the effect of these factors on the ion-exchange capacity. As a result of the differential thermography of ion-exchange resin KY-1 the thermal stages of dissociation at 105 to 260C were established. The moisture content of this resin was determined and the temperature at which this moisture is driven off from the resin was found to be between 105 and 115C. Thus, the stoichiometric property of this moisture was determined. Between 260 and 270C, the decomposition of anhydrous resin takes place. This is accompanied by the general decrease in weight to 43.3% of the initial material as a result of volatile materials. A further heating of the residue up to 500C does not affect decomposition. The  
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thermal effect on the ion-exchange capacity was also studied. It was found that after the thermal dehydration the resin ion-exchange capacity is not affected; however, after retention of resin in an autoclave in water solution at various pressures and temperatures (2-10 atm and 100-200C) its capacity decreases from 4.4 and 4.3 to 3.3 and 3.8 mg-equiv. of base per 1 g of resin. The capacity of resin which is subjected to a temperature of up to 270C is equal to zero. Orig. art. has: 2 figures.

ASSOCIATION: Vysshaya partiynaya shkola. Kafedra promyshlennoy tekhnologii  
(Communist Party School of Higher Education. Department of Industrial Technology)

SUBMITTED: 20Dec61

DATE ACQ: 12Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 005

OTHER: 000

js/Lur  
Card 2/2

SAR'YANOVA, T. Ye.

"Anchovy-Like Sprat, Its Occurrence, Biology, and Possibility for Utilization." Thesis for degree of Cand. Biological Sci. Sub 13 Nov 50, Moscow Technical Inst of the Fish Industry and Economy imeni A. I. Mikoyan

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya-Moskva, Jan-Dec 1950.

SAF'YANOVA, T. YE.

Fishing - Implements and Appliances

Catching anchovies by electric light in the Black Sea in winter, Ryb. khoz., 28 No.  
3, 1952

9. Monthly List of Russian Accessions, Library of Congress, July <sup>1952</sup>~~1953~~, Uncl.

SAF'YANOVA, T.Ye.

Some features of changes in the reaction to light in anchovies and saurels during the year. Trudy sov.Ikht.kom. no.8:97-100 ' 58.  
(MIRA 11:11)

1. Azovo-Chernomorskiy nauchno-issledovatel'skiy institut morskogo  
rybnogo khozyaystva i okeanografii.  
(Saurel) (Anchovies) (Light--Physiological effect)

S. P. Azherniro, T. Ye.; B. Chern, L. . .

Biology and fisheries of the large saur l. Trudy Azcherniro  
no. 18:74-100 '60. (I. 14:10)  
(Black Sea--Saurel)

DANILEVSKIY, N.M.; REVIN, A.S.; SAF'YANOVA, T.Ye.

Distribution of some commercial crustaceans off the west  
African coast. Trudy Azcherniro no.20:57-62 '62.  
(MIRA 16:4)

(Atlantic Ocean—Crustacea)

SAF'YANNIKOVA, Ye.B. (Moskva, D-367, Volokolamskoye shosse, 34, korp.9,kv.5)

Lymphatic system of the fascia of the upper extremities. Arkh. anat.  
gist. i embr. 41 no.9:93-102 3 '61. (MIRA 15:1)

1. Kafedra anatomii cheloveka (zav. - ~~chlen~~-korrespondent AMN SSSR  
prof. D.A. Zhdanov) I Moskovskogo ordena Lenina meditsinskogo  
instituta imeni I.M.Sechenova.  
(LYMPHATICS) (ARM) (FASCIAE (ANATOMY))

SAF'YANOVA, V.M.; KATKOV, V.M.

Network canopy saturated with a repellent as a protective means  
against sand fly attacks. Zdrav. Turk. 8 no.2:36-39 F'64  
(MIRA 17:4)



SAF'YANOVA, V.M.

Epidemiology

Dissertation: "Mosquito Breeding Places Under the Urban Conditions of Central Asia."  
Cand B iol Sci, Acad Med Sci USSR, 11 Mar 54, (Vechernyaya Moskva, Moscow, 1 Mar 54).

SO: SUM 213, 20 Sep 54

PETRISHCHEVA, P.A.; SAF'YANOVA, V.M.; BIBIKOVA, V.A.; GROKHOVSKAYA, I.M.

Protection of humans from bloodsucking insects in reclamation of new areas. Zool.zhur. 33 no.2:361-372 Mr-Apr '54. (MLRA 7:5)

1. Otdel parazitologii i meditsinskoy zoologii (zaveduyushchiy - akademik Ye.N.Pavlovskiy) ~~IM~~ Akademii meditsinskikh nauk SSSR im. N.F.Gamaleya.  
(Insecticides)

SAP'YANOVA, V.M.

Moth fly breeding places under urban conditions in Central Asia.  
Vop.kraev., ob. i eksp.paraz. i med.zool. 9:32-44 '55. (MLRA 10:1)

1. Iz otdela parazitologii i meditsinskoy zoologii (zav. - akad.  
Ye.N.Pavlovskiy) Instituta epidemiologii i mikrobiologii imeni  
N.F.Gamaleya (dir. - deystvitel'nyy chlen Akademii meditsinskikh  
nauk SSSR prof. G.V.Vygodchikov) Akademii meditsinskikh nauk SSSR.  
(SOVIET CENTRAL ASIA--MOTH FLIES)  
(CITIES AND TOWNS)

PETRISHCHEVA, P.A., professor; SAF'YANOVA, V.M.; BUDAK, A.P., podpolkovnik  
meditsinskoy sluzhby; GAYKO, B.A., mayor meditsinskoy sluzhby

New repellents against blood-sucking insects, developed by the  
Scientific Institute of Fertilizers, Insecticides and Fungicides.  
Voen.-med.zhur. no.7:49-53 J1 '56. (MLRA 9:11)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for  
Petrishcheva)  
(INSECT BAITS AND REPELLENTS)